

What is claimed is:

[Claim 1] An organic electroluminescent device comprising an anode , a light-emitting layer composed of an organic material, and a cathode having a structure in which a first cathode composed of a material having a work function of 3.0 eV or less and a second cathode composed of a material having a work function higher than that of the first cathode are sequentially stacked from the light-emitting layer side are stacked on a substrate , the total thickness of the first and the second cathodes being 100 angstroms or less, and light is emitted to the outside via at least the cathode.

[Claim 2] An organic electroluminescent device according to Claim 1, wherein the cathode side is sealed by a sealing layer composed of a light transmissive material.

[Claim 3] An organic electroluminescent device according to Claim 1, wherein the first cathode comprises Ca.

[Claim 4] An organic electroluminescent device according to Claim 1, wherein the thickness y (angstrom) of the first cathode is such that $50 \leq y \leq 80$ holds.

[Claim 5] An organic electroluminescent device according to Claim 1, wherein the thickness y (angstrom) of the first cathode is such that $55 \leq y \leq 65$ holds.

[Claim 6] An organic electroluminescent device according to Claim 1, wherein the second cathode comprises Al.

[Claim 7] An organic electroluminescent device according to Claim 1,

wherein the thickness z (angstrom) of the second cathode is such that $10 \leq z \leq 20$ holds.

[Claim 8] An organic electroluminescent device according to one of Claims 1 to 7, wherein the organic material forming the light-emitting layer is a polymeric material.

[Claim 9] A method for manufacturing an organic electroluminescent device, comprising:

a step of forming an anode on a substrate;

a step of forming a light-emitting layer composed of an organic material above the anode; and

a step of forming a cathode above the light-emitting layer by laminating a first cathode composed of a material having a work function of 3.0 eV or less and a second cathode composed of a material having a work function higher than that of the first cathode from the light-emitting layer side so that the total thickness of the first and the second cathodes is 100 angstroms or less.

[Claim 10] A method for manufacturing an organic electroluminescent device according to Claim 9, wherein the step of forming the anode further comprises a step of performing an oxygen or an air plasma treatment after an electrode film is formed, and a current x and a time t in the treatment are set such that $10 \text{ (mA)} \leq x \leq 15 \text{ (mA)}$ and $5 \text{ (minute)} \leq t \leq 7 \text{ (minute)}$ hold.

[Claim 11] A method for manufacturing an organic electroluminescent device according to Claim 9, wherein the step of forming the anode further comprises a step of performing an oxygen or an air plasma

treatment after an electrode film is formed, and a current x and a time t in the treatment are set such that $10 \text{ (mA)} \leq x \leq 12 \text{ (mA)}$ and $t = 5$ (minute) hold.

2025 RELEASE UNDER E.O. 14176